

GLP-1 Drugs + Food is Medicine: A New Recipe for Success in Treating Obesity?

KEY TAKEAWAYS

- Obesity is a chronic disease that affects nearly 100 million U.S. adults. GLP-1 drugs can help patients lose significant amounts of weight, but could also require lifetime use, have low long-term compliance, potential side effects, and extremely high costs. Given these limitations, GLP-1 drugs cannot solve the U.S. obesity epidemic.
- Food is Medicine (FIM) programs can effectively and efficiently provide healthy food to patients, prescribed by doctors and covered by health insurance.
- The combination of GLP-1 drugs and FIM may provide a holistic, effective, and cost-effective way to maximize the benefits of GLP-1 drugs while minimizing the challenges, risks, and costs.
- Legislation and policy around GLP-1 drug access should include rigorous, evidence-based lifestyle programs, including FIM, to curb health, economic, and disparity burdens of obesity.

GLP-1 DRUGS AND OBESITY

Glucagon-like peptide-1 agonists, also known as GLP-1 drugs, are a new treatment to help people lose weight, primarily through effects on the brain which reduce appetite. In trials, GLP-1 drugs produce weight loss between 12% to 18% of body weight.[1] Examples of approved GLP-1 drugs for weight loss include the brand names Ozempic, Wegovy, and Zepbound. An estimated 93 million American adults meet weight loss eligibility criteria for GLP-1 drugs.[2],[3]

Challenges of GLP-1 Drugs

Need for Lifetime Treatment

Taking GLP-1 drugs can help many people lose weight, but weight loss plateaus at about 12 to 18 months.[1] If a person stops taking the drug, weight is often subsequently regained within one year. This has led to recommended chronic use of the drug: a potential lifetime of use for millions of Americans—including teens.

Poor Adherence

In real-world studies, only one-third of people who start GLP-1 drugs for weight loss are still taking them at one year.[4] Possible reasons for stopping the drug include side effects and costs.[5] The high discontinuation rate is concerning because many patients will have stopped the drug without achieving sustained weight loss, will regain any weight lost, and yet a substantial investment in drug therapy will have been made.

High Costs

Even with heavy manufacturer discounts, the annual cost is about \$10,000/year, per patient.[6] One modeling analysis estimates that if even half of U.S. adults with obesity took weight loss drugs, it would cost \$411 billion per year, including \$166 billion in Medicare and Medicaid.[7] Even accounting for health benefits and lower healthcare spending due to weight loss, these drugs are not cost-effective or cost-saving. These costs are shocking, considering that today the total U.S. healthcare spending on all drugs is \$600 billion.

Risks with Long-Term Use

About half of weight lost with GLP-1 drugs tends to be muscle, rather than fat. This is not optimal for long-term metabolic health. GLP-1 drug use can also lead to malnutrition if patients simply cut calories without paying attention to eating healthy foods.[8]

Inequitable Access

Access to GLP-1 drugs is limited—and especially inequitable for lower-income Americans, those with certain payers, and in marginalized racial and ethnic groups. In an analysis of claims data, lower rates of GLP-1 use were found among Asian, Black, and Hispanic patients with type two diabetes than white patients, and those with a lower household income (<\$50,000) compared to a higher household income.[9]

GLP-1 DRUGS + FOOD IS MEDICINE

We know that good nutrition and other lifestyle changes are critical for weight management. But millions of Americans experience challenges in accessing and affording healthy foods, and millions more have insufficient knowledge around how to identify and cook healthy foods.

Food is Medicine (FIM) interventions provide patients with specific disease conditions, like diabetes or obesity, with medically tailored meals, groceries, or produce, designed by a registered dietitian. FIM programs are prescribed by a doctor and covered by healthcare insurance. These therapies also include nutrition coaching and culinary education. These elements reduce barriers to good nutrition, helping patients eat well and thrive.

Given the promises and challenges of GLP-1 drugs, the critical role of food in weight management, and the effectiveness of FIM programs to overcome barriers to healthy eating, an exciting innovation to treat obesity is to combine GLP-1 drugs + FIM.[1] Eligible patients would receive both a GLP-1 drug and FIM therapy. The FIM prescription would focus on foods to support weight maintenance, reduce muscle loss, and prevent malnutrition.

After 12 to 18 months, many patients may be able to stop the GLP-1 drug and use FIM programming for weight maintenance. Others may require episodic re-use of GLP-1 drugs to help with weight maintenance (see Figure).

Such a combined program would help maximize the benefits of GLP-1 drugs to treat obesity, while helping to address the challenges—reducing the need for lifetime therapy, the problems with poor adherence, the high costs, and the risks. Such a program should also save billions of dollars in health care spending, allowing more widespread use and equitable access.[1]

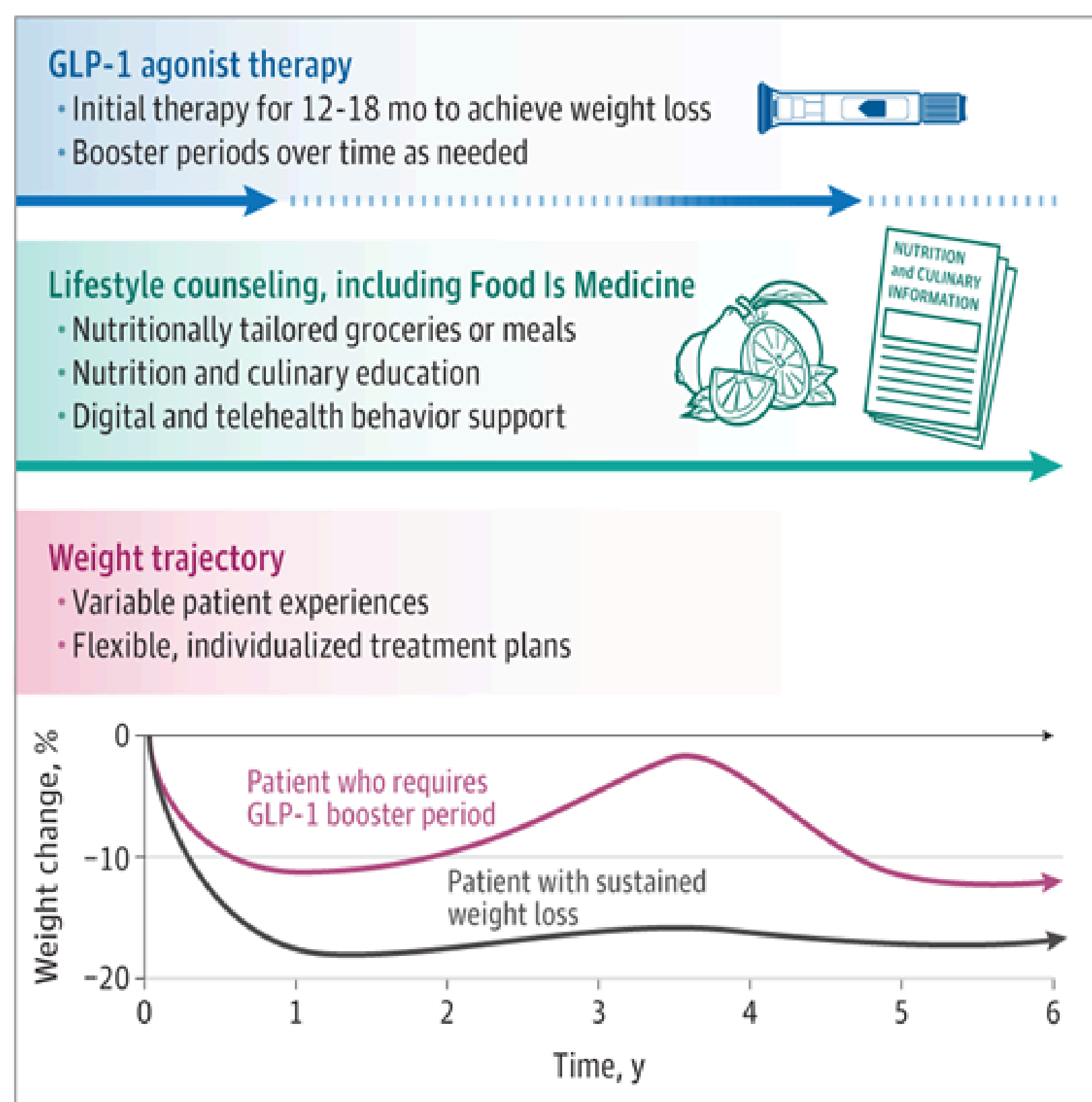


Figure. Combined, Staged GLP-1/FIM Approach to Obesity Treatment[1]: The top of the graphic shows a proposed, testable program that combines GLP-1 drugs, lifestyle counseling, and food is medicine (FIM). Initial GLP-1 drug use could achieve early weight loss, followed by long-term FIM programming and behavioral support for healthier eating, lifestyle, and sustained weight maintenance, with potential booster periods of GLP-1 drug use as needed. The bottom half of the graphic shows experiences of two hypothetical patients: one who achieves sustained weight loss after initial GLP-1 drug use (black line) and another in whom FIM slows weight regain but requires booster GLP-1 drug use at 3.5 years (purple line).

[1] *JAMA*. 2024;331(12):1007–1008. doi:10.1001/jama.2024.2252

[2] Eligibility criteria: body mass index (BMI) of ≥ 30 kg/m² or a BMI of ≥ 27 kg/m² with at least one or more of the following conditions: heart disease, high blood pressure, high cholesterol, or obstructive sleep apnea.

[3] *Cardiovasc Drugs Ther*. 2023. doi:10.1007/s10557-023-07488-3

[4] *J Manag Care Spec Pharm*. 2024;30(8):860–867. doi:10.18553/jmcp.2024.23332

[5] *Diabetes Metab Syndr Obes*. 2017;10:403–412. doi:10.2147/DMSO.S141235

[6] <https://www.kff.org/health-costs/poll-finding/kff-health-tracking-poll-may-2024-the-publics-use-and-views-of-glp-1-drugs/>.

[7] <https://www.sanders.senate.gov/wp-content/uploads/Wegovy-report-FINAL.pdf?utm>

[8] Academy of Nutrition and Dietetics. *The Evolving Role of RDNs in Obesity Management with Medications and Lifestyle Interventions (June 2024)*

[9] *JAMA Health Forum*. 2021;2(12):e214182. doi:10.1001/jamahealthforum.2021.4182